Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently amended) A <u>computer-implemented</u> process for managing capacity resources in a shared computing environment comprising the steps of:

~~producing and maintaining a capacity plan;~~

<u>gathering a plurality of capacity data for a capacity resource set, the capacity resource set including a central processing unit, a storage, a memory, a network or telecommunications hardware, a plurality of peripheral devices;</u>

<u>analyzing the capacity data by extracting capacity obligations from a database and comparing the capacity obligations with existing resources to identify capacity obligations that can be met with existing resources, and to identify capacity obligations that require additional resources;</u>

<u>generating the capacity plan for using the identified existing resources and the identified additional resources to meet capacity obligations;</u>

<u>gaining approval for the capacity plan from one or more persons with the authority to commit to the implementation of the capacity plan;</u>

<u>notifying any parties to the capacity plan of the plan details;</u>

handling capacity requests from a requester;

performing analysis review on capacity requests to identify capacity issues; ~~and~~

executing a problem manager program in a data-processing system to resolve any identified capacity issues so that a service provider can meet all service obligations<u>;</u>

<u>responsive to determining that the capacity data is not already available, contacting the capacity data owner;</u>

<u>requesting the capacity data;</u>

<u>justifying the request for the capacity data to the capacity data owner; and</u>

identifying a plurality of future capacity planning issues based on a selection of a set of projection methodologies including business drivers, linear regression, percent change, direct customer Input, and historical trend data.

2.   (Canceled)

3.   (Currently amended) The process of Claim 2 wherein gathering capacity data comprises the steps of:

        determining capacity data requirements;

        determining suppliers of the capacity data;

        determining if the capacity data is already available;

        acquiring the capacity data from the database;

        validating the capacity data;

        determining if there is a ~~regular~~ need for the data; and

        updating and documenting the database.

4.   (Canceled)

5.   (Original) The process of Claim 2 further comprising the steps of:

        before gaining approval for the capacity plan, designing a configuration to support the capacity plan; and

        testing the designed configuration to determine if the configuration is capable of balancing a workload as required to meet existing and anticipated capacity obligations.

6.   (Original) The process of Claim 2 further comprising the step of, before gaining approval for the capacity plan, analyzing the performance impact of the capacity plan by determining the impact to the components of the capacity plan during the plan period.

7. (Currently amended) The process of Claim 1 wherein handling a capacity request comprises the steps of:

analyzing the capacity request with a problem management program;

extracting the requester's entitlements and ~~standard~~ provided data from a database;

determining if the requester is entitled to have the capacity request satisfied;

responsive to determining that the requester is entitled to have the capacity request satisfied, determining if any ~~non-standard~~ not provided data is required to satisfy the capacity request;

responsive to determining that ~~non-standard~~ a not provided data is required to satisfy the capacity request, submitting a request for the ~~non-standard~~ not provided data to a collection team, receiving the ~~non-standard~~ not provided data from the collection team, and reviewing the ~~non-standard~~ not provided data received from the collection team;

analyzing the capacity plan against actual usage data; and

updating the capacity plan to reflect the result of the capacity request.

8. (Original) The process of claim 7 wherein analyzing the capacity plan against actual usage data comprises the steps of:

obtaining plan data from the database;

obtaining actual usage data from the database;

comparing the plan data with actual usage data;

determining from the comparison if the actual usage data deviates from the plan data; and

responsive to determining that the actual usage data deviates from the plan data, investigating the deviations.

9. (Original) The process of claim 8 wherein investigating the deviations comprises the steps of:

determining if the deviation is the result of an anomaly; and

responsive to determining that the deviation is a result of an anomaly, documenting the deviation.

10.   (Original) The process of claim 8 wherein investigating the deviations comprises the steps of:

    determining if the deviation is the result of a business cycle;

    responsive to determining that the deviation is the result of a business cycle, documenting the deviation.

11.   (Original) The process of claim 8 wherein investigating the deviations comprises the steps of:

    determining if the deviation is the result of bad data capture; and

    responsive to determining that the deviation is the result of a bad data capture, documenting the bad data capture details with a problem management program and documenting the deviation with a problem management program.

12.   (Original) The process of claim 8 wherein investigating the deviations comprises the steps of:

    determining if the deviation is the result of an unknown reason; and

    responsive to determining that the deviation is the result of an unknown reason, documenting the deviation with a problem management program, determining if the deviation is likely to re-occur, and responsive to determining that the deviation is likely to re-occur, documenting the required capacity plan changes.

13.   (Original) The process of Claim 1 wherein handling a capacity request comprises the steps of:

    analyzing the capacity request with a problem management program;

    extracting the requester's entitlements and standard data from a database;

    determining if the requester is entitled to have the capacity request satisfied;

    responsive to determining that the requester is entitled to have the capacity request satisfied, determining if any non-standard data is required to satisfy the capacity request;

    responsive to determining that non-standard data is required to satisfy the capacity request, submitting a request for the non-standard data to a collection team, receiving the non-

standard data from the collection team, and reviewing the non-standard data received from the collection team;

    managing capacity data for reporting;

    determining if new or changed reports are required;

    responsive to determining that new or changed reports are required, running reports; and updating the capacity plan to reflect the result of the capacity request.

14.   (Original) The process of Claim 13 wherein managing capacity data for reporting comprises the steps of:

    determining the data required for generating reports;

    determining if additional data elements are needed for generating reports;

    responsive to determining that additional data elements are needed for generating reports, requesting the additional data elements from a data collection team, and responsive to receiving the additional data elements from the data collection team, validating the additional data elements;

    determining the report format;

    determining the frequency and date of reporting;

    determining the destination for the report; and

    notifying a report recipient when the report is available for retrieval from a database.

15.   (Original) The process of Claim 13 wherein running reports comprises the steps of:

    extracting report specifications from the database;

    creating pre-defined reports with a reporting program;

    determining if the report format or report content requires correction;

    responsive to determining that the report requires correction, making the required changes to the report; and

    distributing reports to one or more report recipients.

16.　　(Original) The process of Claim 1 wherein handling a capacity request comprises the steps of:

　　　　analyzing the capacity request with a problem management program;

　　　　extracting the requester's entitlements and standard data from a database;

　　　　determining if the requester is entitled to have the capacity request satisfied;

　　　　responsive to determining that the requester is entitled to have the capacity request satisfied, determining if any non-standard data is required to satisfy the capacity request;

　　　　responsive to determining that non-standard data is required to satisfy the capacity request, submitting a request for the non-standard data to a collection team, receiving the non-standard data from the collection team, and reviewing the non-standard data received from the collection team;

　　　　analyzing trends; and

　　　　updating the capacity plan to reflect the result of the capacity request.

17.　　(Original) The process of Claim 16 wherein analyzing trends comprises the steps of:

　　　　identifying relevant trends;

　　　　obtaining historical capacity data from the database;

　　　　determining if a specific analysis is required;

　　　　responsive to determining that a specific analysis is required, determining if additional capacity data is available, responsive to determining that additional capacity data is not available, requesting the additional capacity data from a collection team;

　　　　obtaining the additional capacity data;

　　　　selecting resource types and workload types to identify trends;

　　　　responsive to identifying trends, documenting the trends in the database;

　　　　determining if any identified trends deviate from the capacity plan; and

　　　　responsive to determining that one or more identified trends deviates from the capacity plan, investigating the deviations.

18.   (Original) The process of claim 17 wherein investigating the deviations comprises the steps of:

    determining if the deviation is the result of an anomaly; and

    responsive to determining that the deviation is a result of an anomaly, documenting the deviation.

19.   (Original) The process of claim 17 wherein investigating the deviations comprises the steps of:

    determining if the deviation is the result of a business cycle;

    responsive to determining that the deviation is the result of a business cycle, documenting the deviation.

20.   (Original) The process of claim 17 wherein investigating the deviations comprises the steps of:

    determining if the deviation is the result of bad data capture; and

    responsive to determining that the deviation is the result of a bad data capture, documenting the bad data capture details with a problem management program and documenting the deviation with a problem management program.

21.   (Original) The process of claim 17 wherein investigating the deviations comprises the steps of:

    determining if the deviation is the result of an unknown reason; and

    responsive to determining that the deviation is the result of an unknown reason, documenting the deviation with a problem management program, determining if the deviation is likely to re-occur, and responsive to determining that the deviation is likely to re-occur, documenting the required capacity plan changes.

22.   (Original) The process of Claim 1 wherein handling a capacity request comprises the steps of:

　　　analyzing the capacity request with a problem management program;

　　　extracting the requester's entitlements and standard data from a database;

　　　determining if the requester is entitled to have the capacity request satisfied;

　　　responsive to determining that the requester is entitled to have the capacity request satisfied, determining if any non-standard data is required to satisfy the capacity request;

　　　responsive to determining that non-standard data is required to satisfy the capacity request, submitting a request for the non-standard data to a collection team, receiving the non-standard data from the collection team, and reviewing the non-standard data received from the collection team;

　　　analyzing commitments and thresholds;

　　　determining if threshold changes are required;

　　　responsive to determining that threshold changes are required, using a problem manager program to determine the new threshold value; and

　　　updating the capacity plan to reflect the result of the capacity request.

23.   (Original) The process of Claim 22 wherein analyzing commitments and thresholds comprises the steps of:

　　　obtaining operational trend data from the database;

　　　obtaining capacity and performance objectives from the database;

　　　obtaining service level attainment and customer satisfaction data from the database;

　　　determining if any service commitments have been missed;

　　　responsive to determining that one or more service commitments have been missed, determining resource usage at the time of the missed service commitment;

　　　reviewing thresholds against current service commitments;

　　　determining if threshold changes are required;

　　　responsive to determining if threshold changes are required, documenting the required threshold changes;

　　　determining if capacity plan changes are required; and

responsive to determining that capacity plan changes are required, updating the capacity plan to reflect the required changes.

24.   (Original) The process of Claim 1 wherein handling a capacity request comprises the steps of:

analyzing the capacity request with a problem management program;

extracting the requester's entitlements and standard data from a database;

determining if the requester is entitled to have the capacity request satisfied;

responsive to determining that the requester is entitled to have the capacity request satisfied, determining if any non-standard data is required to satisfy the request;

responsive to determining that non-standard data is required to satisfy the capacity request, submitting a request for the non-standard data to a collection team, receiving the non-standard data from the collection team, and reviewing the non-standard data received from the collection team;

forecasting resource requirements; and

updating the capacity plan to reflect the result of the capacity request.

25.   (Original) The process of Claim 24 wherein forecasting resource requirements comprises the steps of:

gathering resource and workload requirements;

obtaining load requirements from the database;

obtaining historical trends from the database;

characterizing and sizing workload requirements;

determining and applying a projection methodology;

forecasting and sizing periods for the workload requirements;

translating the workload requirements to technical resource needs; and

updating the capacity plan to reflect the technical resource needs.

26.   (Original) The process of Claim 25 wherein characterizing and sizing workload requirements comprises the steps of:

    identifying a unit of workload;

    determining a period of interest;

    determining a magnitude of usage;

    determining a duration of usage;

    extracting resource usage data from the database for the period of interest;

    determining the resource used per unit of workload;

    correlating the unit of workload with the resource usage data;

    applying assumptions;

    applying and normalizing factors; and

    validating results with peer reviews.

27.   (Original) The process of Claim 25 wherein determining and applying a projection methodology comprises the steps of:

    reviewing available workload data;

    evaluating appropriateness and source of workload data;

    choosing the most appropriate projection methodology;

    applying the chosen projection methodology;

    producing forecast projections and assumptions; and

    storing the forecast projections and assumptions in the database.

28.   (Original) The process of Claim 1 wherein handling a capacity request comprises the steps of:

    analyzing the capacity request with a problem management program;

    extracting the requester's entitlements and standard data from a database;

    determining if the requester is entitled to have the capacity request satisfied;

    responsive to determining that the requester is not entitled to have the capacity request satisfied, documenting the entitlement failure details;

    handling the service entitlement failure; and

    notifying the requester that the request will not be fulfilled.

29.   (Original) The process of Claim 28 wherein handling the service entitlement failure comprises the steps of:

determining if the capacity request is covered by a contract; and

responsive to determining that the capacity request is not covered by the contract, advising the requester that the capacity request will be cancelled.

30.   (Original) The process of Claim 28 wherein handling the service entitlement failure comprises the steps of:

determining if the capacity request is covered by a contract;

responsive to determining that the capacity request is covered by a contract, determining if the requester is entitled to any available alternatives;

responsive to determining that the requester is entitled to one or more available alternatives, reviewing the available alternatives with the requester to gain acceptance of at least one of the available alternatives; and

responsive to gaining acceptance of at least one of the available alternatives, updating the capacity plan to reflect the result of the capacity request.

31.   (Original) The process of Claim 28 wherein handling the service entitlement failure comprises the steps of:

determining if the capacity request is covered by a contract;

responsive to determining that the capacity request is covered by a contract, determining if the requester is entitled to any available alternatives;

responsive to determining that the requester is not entitled to any available alternatives, obtaining approval for the original request; and

updating the capacity plan to reflect the result of the capacity request.

32.   (Original) The process of Claim 1 embedded in computer program product.

33.   (Currently amended) A system for managing capacity resources in a shared computing environment comprising:

a service provider;

a plurality of service obligations;

a plurality of capacity resources including a central processing unit, a storage, a memory, a network or telecommunications hardware, a plurality of peripheral devices; and

a capacity planner that produces and maintains a capacity plan, wherein the capacity plan substantially identifies current and needed capacity resources and substantially describes the allocation of the current and needed capacity resources, and executes the capacity plan so that the service provider meets all service obligations;

identifying a plurality of future capacity planning issues based on a selection of a set of projection methodologies including business drivers, linear regression, percent change, direct customer Input, and historical trend data.

34.   (Original) The system of Claim 32 wherein the capacity planner further handles capacity requests.

35.   (Original) The system of Claim 33 wherein the capacity planner further reviews capacity requests to identify capacity issues that should be resolved in a future capacity plan.

36.   (Currently amended) A system for managing capacity resources in a shared computing environment comprising:

a service provider;

a plurality of service obligations;

a plurality of capacity resources including a central processing unit, a storage, a memory, a network or telecommunications hardware, a plurality of peripheral devices ;

means for producing and maintaining a capacity plan;

means for handling capacity requests; and

means for reviewing capacity requests to identify capacity issues; and

identifying a plurality of future capacity planning issues based on a selection of a set of projection methodologies including business drivers, linear regression, percent change, direct customer Input, and historical trend data.